

UNITED STATES DEPARTMENT OF AGRICULTURE  
FOREST SERVICE

Forest Insect & Disease Management  
P.O. Box 5895, Asheville, NC 28803

REPLY TO: 5230 Evaluation  
Report No. 78-1-6

January 19, 1978

SUBJECT: Southern Pine Beetle Evaluation, Stearns Ranger District,  
Daniel Boone National Forest, Kentucky

TO: Richard H. Wengert, Supervisor, Daniel Boone NF



In September, a ground examination of the Stearns Ranger District was conducted by Iral Ragenovich, entomologist, Forest Insect and Disease Management. She was accompanied by Pete Kovalic and Nick Nicholas. The ground check was conducted to determine the status of southern pine beetle, Dendroctonus frontalis Zimm., on the Stearns Ranger District.

The spots examined were spots detected during the September presuppression flight and ground surveillance conducted by District personnel. A total of six spots containing from 3 to 10 red and fading trees were examined. A second flight was conducted by District personnel in November to determine any later beetle activity.

Results: None of the spots examined were infested with southern pine beetle. Some spots were infested with black turpentine beetle, Dendroctonus terebrans Oliv., and/or Ips engraver beetles. These spots displayed the traditional characteristics such as the large pitch masses in the case of black turpentine beetle; and trees with either dying or partially red tops as in the case of Ips beetles. Examination under the bark showed no evidence of southern pine beetle galleries and confirmed the existence of the other bark beetles. This very low southern pine beetle levels on the Stearns District follows a pattern of declining beetle populations that has occurred throughout the southeastern states. During the previous years, large numbers of southern pine beetle spots were observed in the late fall, therefore, it was decided that another presuppression flight should be conducted after hardwood leaf fall. No new red-topped trees were observed on that flight. Some salvage operations were being conducted in areas, such as the New Liberty area, where most southern pine beetle activity had been concentrated in previous years. The District received FY 1978 first quarter project funding for pre-suppression flights and suppression activities.

Recommendations: Based on the low southern pine beetle population levels on the District and the declining population trend throughout the southeast, it is recommended that the southern pine beetle suppression project no longer be continued on the Stearns District.

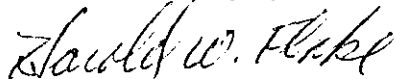
Post Suppression Evaluation: Salvage constituted the main type of suppression activity on the District. During FY 1977, approximately 1,819 MBF and 889 CCF of sawtimber and pulpwood were salvaged. Seventy percent of this volume was salvaged between November and April. Priorities were set on removing high value timber in accessible areas. Although large infestations occurred in less valuable timber on ridges, little attempt was made to salvage in these areas since the cost would be greater

than the value of the timber. Some problems were experienced with spot breakouts, especially in areas where large infestations had occurred.

The natural decline of southern pine beetle populations throughout the southeast is probably the most significant influencing factor in the suppression of the insect.

If District personnel note an increase in southern pine beetle activity, they should contact the Forest Insect and Disease Management office in Asheville. The FI&DM aerial survey team will conduct a detection flight during the summer of 1978.

If there are any questions, please contact our office in Asheville.



HAROLD W. FLAKE  
Field Office Representative

cc: Peter P. Kovalic, Daniel Boone NF  
Walt Fox, Atlanta  
Nick Nicholas, Stearns RD

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